

Title (en)

SOLID ELECTROLYTE AND ALL-SOLID-STATE BATTERY

Title (de)

FESTELEKTROLYT UND FESTSTOFFBATTERIE

Title (fr)

ÉLECTROLYTE SOLIDE ET BATTERIE TOUT SOLIDE

Publication

**EP 3447837 A4 20191106 (EN)**

Application

**EP 17785600 A 20170203**

Priority

- JP 2016083862 A 20160419
- JP 2017004061 W 20170203

Abstract (en)

[origin: US2019006702A1] A solid-state electrolyte having a NaSICON-type crystal structure represented by a general formula  $\text{Li}_{1+x}\text{M}_y(\text{PO}_4)_3$ , in which a part of P may be substituted by at least one selected from the group consisting of Si, B, and V; M includes at least one element selected from a monovalent cation to a tetravalent cation, x is -0.200 to 0.900, and y is 2.001 to 2.200.

IPC 8 full level

**H01M 10/0562** (2010.01); **C01B 25/45** (2006.01); **H01B 1/06** (2006.01); **H01B 1/08** (2006.01); **H01M 10/052** (2010.01); **H01M 10/0525** (2010.01)

CPC (source: EP US)

**C01B 25/45** (2013.01 - EP US); **H01B 1/06** (2013.01 - EP US); **H01B 1/08** (2013.01 - EP US); **H01M 4/02** (2013.01 - US);  
**H01M 10/045** (2013.01 - US); **H01M 10/0525** (2013.01 - EP US); **H01M 10/056** (2013.01 - US); **H01M 10/0562** (2013.01 - EP US);  
**H01M 2004/027** (2013.01 - US); **H01M 2004/028** (2013.01 - US); **H01M 2300/0071** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP);  
**Y02P 70/50** (2015.11 - EP)

Citation (search report)

- [X] JP 2015076324 A 20150420 - MURATA MANUFACTURING CO
- [E] EP 3539925 A1 20190918 - DAIICHI KIGENSO KAGAKU KOGYO [JP], et al
- See references of WO 2017183255A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 2019006702 A1 20190103**; CN 109075389 A 20181221; EP 3447837 A1 20190227; EP 3447837 A4 20191106;  
JP WO2017183255 A1 20181025; WO 2017183255 A1 20171026

DOCDB simple family (application)

**US 201816121805 A 20180905**; CN 201780022831 A 20170203; EP 17785600 A 20170203; JP 2017004061 W 20170203;  
JP 2018512789 A 20170203